New Hampshire Department of Environmental Services

Drinking Water Source Assessment Program (DWSAP) Follow-up Strategy Progress Report – Updated September 9, 2005

In January 2003, NHDES completed distribution of Source Assessment Reports to water suppliers and local planning boards. In late February, NHDES's Drinking Water Source Protection Program (DWSPP) sent each local planning board a summary table of DWSAP results for sources serving public water systems based in their respective town, along with a new fact sheet that outlined the protection approaches corresponding to each of the vulnerability ranking criteria used in the Source Assessments. By September 2003, NHDES developed a follow-up strategy that addresses all community and non-transient systems whose sources were assessed under the DWSAP (i.e., all systems except transients and newer post-DWSAP systems).

An analysis of DWSAP results found the following:

Top 6 Categories of Threats

(in terms of percentage of High + Medium vulnerability rankings)

Category	Surface Sources	Community Sources	Schools and Daycare
Agricultural Land Cover	42%	84%	93%
Septic Systems and Sewers	56%	82%	84%
Highways or Railroads	49%	56%	74%
Sanitary Survey Deficiencies		44%	85%
Potential Contamination Sources	58%	35%	63%
Urban Land Cover		26%	28%
Known Contamination Sources	45%		
Pesticides Application Areas	45%		

Percentage of sources in each category that received a High or Medium vulnerability rating for that category of threat.

In July 2003, DWSPP staff developed a list of 12 tasks to use the DWSAP results to target outreach efforts and bring about improved source protection.

Task 1: Consumer Confidence Report (CCR) Reform

In July of 2003 Sarah Pillsbury, Paul Susca, Richard Thayer, and EPA rep Pat Hamlin met and discussed the need to bring CCRs into compliance with the Source Assessment requirements. DWSPP intern Kristen Conte reviewed all 695 of the Year 2003 CCRs in the fall, and concluded that 80% of the CCRs submitted contained either the summary or listed the availability of the assessment, or both. A letter was sent out reminding the

water systems that *both* are required. To date we have received about 10-15 phone calls asking about the SWAP. The data from this task was also used in an article in *The Source* (see Task 11) regarding the requirement to report on the Source Assessment results in the CCRs. **COMPLETED**

Task 2: Regional Planning Commission (RPC) Source Water Protection (SWP) Training for Planners

In 2001 the DWSPP held a workshop for RPC and municipal planners on SWP measures they could use in planning. Beginning in 2003 this became an annual event; the participation of each RPC is required as a component of their environmental planning grants from NHDES. The 2004 workshop included a presentation on the availability of SWAP data through the NHDES web site and the availability of DWSAP data for spatial analysis. In 2005 the number of attendees doubled to 150. **ONGOING**

Task 3: Evaluation of the effectiveness of the newsletter The Source

In September 2003 Nicole Clegg created a survey to evaluate the DWSPP's newsletter *The Source*. At that time two surveys were created: one that was placed on the DWSPP website and the other for staff to use for phone calls. Upon placing the survey on the website an e-mail was sent to the recipients of *The Source* asking them to fill out the survey. After the e-mail we received approximately 75 surveys out of hundreds of recipients that receive the newsletter through e-mail. Out of 60 phone calls made to recipients that receive the newsletter through the mail there were only 15 surveys filled out. Nicole, Jessica, Wade, and Paul met to discuss some of the issues that have come up. The two most predominant issues were: the public water system contacts are no longer current, and the planning boards and conservation commission members never receive the copies that are addressed to the board or commission chairs. In late 2004 the lists of newsletter recipients were updated. We plan to do another round of surveys after new people on the list have received a few issues. For the PBs and CCs we didn't come up with an answer. This will need to be looked at prior to starting the next round of surveys. **ONGOING**

Task 4: Direct contact with 98 systems that do not have waivers and have potential contamination sources (PCSs) in their wellhead protection area (WHPA).

Jessica Brock developed a protocol for the task in September 2003. The list was then given to groundwater protection specialist Jack Shields of Northeast Rural Water Association to choose 3-20 of the 98 systems. Jack began working on the list, slow start because systems were not really interested. It was determined that Jack should start by focusing on schools (Nov/Dec 2003) to see if there is more interest there. Jack contacted 18 school systems (first by phone, then in writing) promoting the Chemical Monitoring Waiver program. One of those systems accepted Jack's invitation to prepare a waiver application. **NOT COMPLETED**

Task 5: Contact (94) systems without waivers and without PCSs initially by mail and secondary through phone calls.

Jessica developed a protocol for this task in September 2003. In the middle of September a letter was sent with a post card asking for a response on whether or not they would like to receive a waiver application. Since then we have received 42 post cards back and Jessica has gotten approximately 20 responses from some of the systems that had not responded earlier. This task resulted in 48 waiver applications. Some systems that had not responded said they wanted to sample while others had sanitary survey deficiencies and thus are ineligible for the waiver. The assumption is being made that if they did not respond to the letter they are not interested in the waiver program. **COMPLETED**

Task 6: Design and produce brief, colorful source protection flier

Nicole and Paul came up with the content and design for the flier. The flier is meant to be included in the systems waiver renewal letters. The flier explains information about the SWARs as well as letting systems know that they should look at their high and medium rakings from the SWAR. Then if they look at the WD-WSEB-12-8 fact sheet they can determine what action should be taken. Flier **COMPLETED** Mailing of flier **ONGOING** until January 2007.

Task 7: Identify a subset of systems with multiple source assessment issues that have waivers and contact them with specific recommendations

Paul created the protocol and Jessica developed a form for the calls in September. Wade and Jessica started making phone calls, but soon realized the people they were speaking with knew nothing about the Source Assessment Reports. Paul made some calls and made specific protection suggestions, but system owners were not receptive. The suggestion was brought forth that we send all the public water systems a copy of fact sheet 12-8. Pierce prepared a re-evaluation of our approach; see Task 12. **ON HOLD**

Task 8: Identify systems with sanitary radius issues and then provide them with information on how to apply for grants to resolve these issues.

A list of 42 systems was identified in August 2003. Between August and October, Northeast Rural Water Association's groundwater protection specialist contacted each system and offered to go on site to identify opportunities to address the issues, where feasible, with grants from NHDES. These calls resulted in a 12 site visits and one security-related grant application. **COMPLETED**

Task 9: Identify and approach towns with many sources with many issues

A GIS analysis was performed to identify towns with high concentrations of public water supply sources with multiple issues as identified by the DWSAP. These towns would then be considered candidates for focused outreach and assistance to support town-wide or multi-system source protection programs. Various scoring systems were used, some giving equal weight to all sources, some giving weight in proportion to population served. The results of this analysis were used to recommend candidate towns to Northeast Rural Water Association (now N.H. Rural Water Association), whose source protection program was seeking project sites involving multiple systems or multiple sources. NeRWA had worked with Plaistow (2001/2002), which had ranked very high

on this list, and is working with Gilford and Bow in 2005. NeRWA contacted several other towns identified using this approach, but decided for various reasons (local political complications, lack of local interest) not to pursue them. With a view to duplicating the NHRWA model, DES extended the application deadline for Local Source Water Protection Grants until the end of April 2005 for multiple-system projects. Some regional planning commissions expressed interest, but none submitted applications. Efforts continue to encourage the RPCs to develop these so-called umbrella projects. **ONGOING** (NHRWA does three SWP plans per year.)

Task 10: Focused assistance to a small number of motivated systems

Paul identified systems and has conveyed this information to NHRWA. NHRWA has worked with Walpole, Plymouth, Meredith, and Warren. **ONGOING** (NHRWA does three SWP plans per year)

Task 11: Series of articles in *The Source* newsletter

The Drinking Water Source Protection Program is running a series of articles in its quarterly newsletter, *The Source*, on various aspects of using the DWSAP results to enhance source protection. **COMPLETED**

The Source Issue	Article topic	
Spring 2003	"Putting your assessment reports to work for you."	
Summer 2003	"Don't forget septic systems as potential threats."	
Fall 2003	"What can water suppliers do about agriculture?"	
Winter 2004	"Boil down your SWAR for your CCR"	
Summer 2004	(Minimizing PCS risks with inspection programs)	
Fall 2003	Education and voluntary BMP programs	
Fall 2004	Sanitary Protective Radius issues	
Spring 2005	Working with neighboring systems	
Fall 2005	Spill response planning and readiness	

Task 12: Call large systems with a population greater than 3500.

This task was on hold until someone was available to work on this project. Sarah and Pierce took up this task in October/November 2004. There are approximately 40 systems. After meeting with seven systems, Pierce prepared an evaluation of the Task 12/Task 7 approach (6/17/05). We are preparing a template for a medium-to-large system wellhead protection program plan checklist employing the DWSAP results, which we can use to identify action items and ask water suppliers to commit to implementing. **ONGOING**